

Wind Turbine Technician

Wind turbine technicians are responsible for keeping wind turbine equipment running smoothly. Their work involves maintaining, testing and repairing mechanical and electrical equipment and monitoring daily performance. They work at onshore or offshore wind farms.

The Work

You could be:

- finding faults on all turbine systems, including mechanical, electrical and hydraulic
- making routine inspections on all systems
- climbing up high wind turbine towers wearing a safety harness to carry out repair work
- maintaining and repairing main systems and components, such as transformers and cabling
- updating the site manager on the progress of maintenance, repair or inspection work and producing reports and checklists
- travelling to other sites to fix a machine failure or breakdown
- supervising junior technicians, or inspecting the work of other onsite maintenance workers
- monitoring stock and ordering spare parts
- following strict health and safety procedures.

Pay

The figures below are only a guide. Salaries may vary, depending on:

- where you work
- the size of company or organisation you work for
- the demand for the job.

A Modern Apprentice may start on the National Minimum Wage (NMW). At present the apprentice rate, for those aged under 19 or aged 19 or over and in the first year of their apprenticeship, is £4.30 an hour (1 April 2021). Some employers may pay their apprentices more.

In Scotland salaries for qualified wind turbine technicians start around £25,000 a year. This rises to between £30,000 and £40,000 a year with further experience. Some employers may offer additional benefits such as travel allowance, and a bonus and company pension scheme.

Conditions

- You will work on site at an offshore or onshore wind farm.
- You will probably work a 40-hour week Monday to Friday and be available weekends or for emergency callouts.
- You usually work as part of a team of two or more.
- This work is hazardous. You will be working at heights with high voltage electrical equipment, sometimes offshore. Some wind turbines are over 140 metres high.

- You will wear protective gear such as hardhat, overalls, safety shoes, goggles or gloves. You must wear a safety harness for working at heights.
- You will travel to different sites within a specific geographic area.
- You may spend time away from home.

Getting In

- Currently most entrants already have an engineering qualification together with relevant wind farm experience. Although, other industrial experience such as oil and gas, marine or utilities is also considered.
- The best way in is to take a qualification in an electrical, electronic or mechanical engineering subject. Relevant courses include an NC, NQ, HNC or HND, or a City and Guilds Wind Turbine Technician qualification.
- Entry requirements range from 3 subjects at National 4 or 5 for NC and NQ courses to 1-2 Highers for HNC and HND courses. You should normally have English, Maths and at least one science or technological subject.
- You could take a Modern Apprenticeship (MA) in Wind Turbine Operation and Maintenance at SCQF Level 6 and then apply for a traineeship as a wind turbine technician. You usually need 3-4 subjects at National 4 or 5 including English, Maths and a science or technological subject.
- Ayrshire, Dumfries and Galloway and Fife College offer City and Guilds courses in wind turbine technology and maintenance. Successful completion can lead to a place on an MA or further study at HNC or HND level. See the college websites for more details and entry requirements.
- You may need a driving licence for travelling around sites.
- To work offshore, you may need to pass a medical and an offshore survival course such as the Basic Offshore Safety Induction and Emergency Training Certificate (BOSIET).

Typical employers are wind turbine manufacturers and companies specialising in developing, constructing and operating onshore and offshore wind farms. There are also opportunities with renewable energy operation, maintenance or utility companies.

What Does It Take

You need to have:

- an interest in science and technology
- good problem solving and analytical skills
- practical and technical abilities
- good numeracy and IT skills
- an accurate and methodical approach
- an eye for detail
- a good level of physical fitness
- a responsible attitude to health and safety.

You need to be:

- able to work alone or as part of a team
- good at communicating with others

- able to follow instructions and read schematic drawings
- willing to work in all weather
- willing to work at heights.

Training

- Training through a Modern Apprenticeship (MA) combines on the job and off the job training leading to the City and Guilds Diploma in Electrical Power Engineering — Wind Turbine Operations and Maintenance at SCQF Level 6 and the City and Guilds Diploma in Electrical Power Engineering — Wind Turbine Maintenance (Technical Knowledge) at SCQF Level 6.
- After you qualify and do further training with your employer, you can work towards registering as an Engineering Technician (EngTech) with the Engineering Council. Check their website for details on the various approved routes you can take.
- You need to take specialist courses for working at heights, such as the Working at Height with Rescue. Look up the [Renewable UK website](#) for details.
- You need to keep up to date with training and new developments throughout your working life.

Getting On

- Technicians usually work under the general supervision of professional engineers. With further study and training, you could progress to become an electrical or mechanical engineer at the higher levels of Incorporated Engineer (IEng) or Chartered Engineer (CEng).
- With experience you may be promoted to work as a site manager.
- You could move into blade maintenance and repair work.
- You would be able to work as an electrical or mechanical engineer in other industries such as manufacturing, marine, oil and gas or utilities.
- There may be opportunities to work abroad.

More Information

According to a report from Cambridge Econometrics, it is predicted that direct employment in the UK offshore wind sector could reach 21,000 jobs by 2032.

Contacts

Engineering Council

Tel: 020 3206 0500
 Website: www.engc.org.uk
 Twitter: @EngCouncil

EngineeringUK

Website: www.engineeringuk.com
 Twitter: @_EngineeringUK

Enginuity (formerly SEMTA)

Tel: 0845 643 9001
 Email: Customer.Services@enginuity.org
 Website: enginuity.org
 Twitter: @Enginuity_Org

Facebook: www.facebook.com/EnginuityOrg

Institution of Mechanical Engineers

Tel: 020 7222 7899

Email: enquiries@imeche.org

Website: www.imeche.org

Twitter: @IMechE

Facebook: www.facebook.com/imeche

RenewableUK

Tel: 020 7901 3000

Website: www.renewableuk.com

Twitter: @RenewableUK

Statistics

Employment Status UK %

100.00%
FT Employee

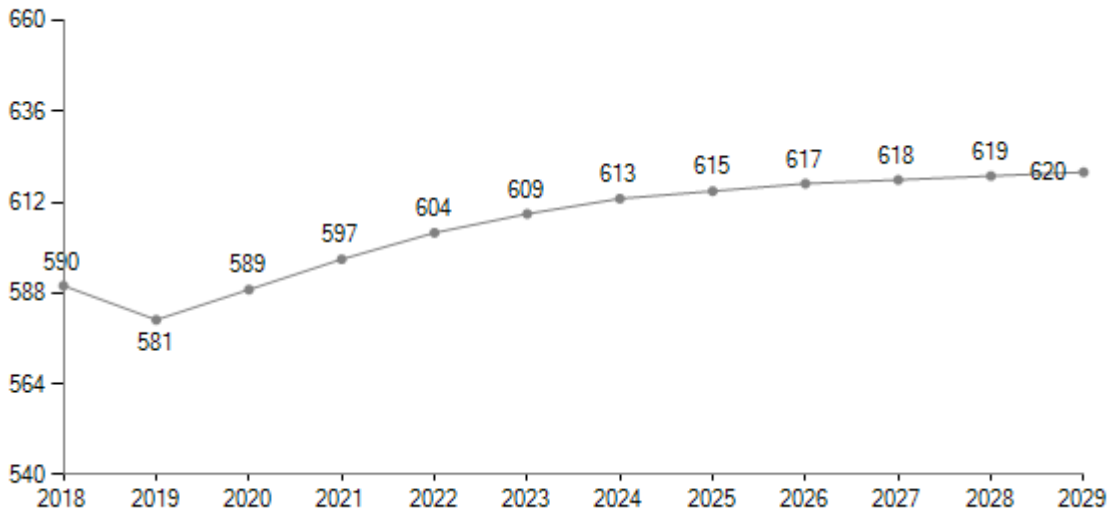


Past Unemployment - Scotland

No Claimant statistics available for Scotland.

LMI data powered by [LMI for All](#)

Predicted Employment in Scotland



LMI data powered by [EMSI UK](#)